

REMARKS

In the last Office Action, the Examiner rejected the proposed claim under 35 USC Section 102, as well as Section 103, in light of US 5,850,845 Pereira ('845). It is believed that the admitted claims clearly specify the claimed arrangement that is not anticipated in the prior art nor rendered obvious by the same. The '845 patent is very similar to the noted prior art in Figs. 1-4 of the present application. In general, the '845 disclosure specifies a supplemental passageway 50 that is shown in Figs. 4 and 5 and described in the specification beginning at column 3, line 44. The second sentence in that paragraph states that the supplemental passageway 50 helps to ensure that the air gap 56 is cleaned or flushed, primarily of any milk residue.

Figs. 3A and 3B in '845 show the back flush valve in a milking position and a back flush position, respectively. However, it should be noted that, given the supplemental passageway 50 which is a part of the slide pad 16, during a point in the transition from the milking position to the cleaning position there must be a transitional point which is similar to that as shown in the attached Exhibit A, which is constructed personally by the patent attorney of record in the present matter. In general, Exhibit A shows Figs. 3A and 3B on the left and right hand portions, and the center figure is constructed based upon cutting and pasting the components and superimposing them thereupon one another to illustrate the relationship of the various ports and channels.

The center portion in Exhibit A is essentially only illustrating the necessary orientation of the slide pad 16 with respect to the inlet and outlet plates 18 and 20 as it is in quick transition. Therefore, it can be appreciated that in this transition state, there is a potential for communication with a cleaning solution to contaminate the milk supply via entering through the cleaning solution inlet 122, passing through the supplemental passageway 50, entering into the lateral air gap 56, and then traveling inward toward the milk inlet 24 and passing in the opposite direction through the milk bore 32. The cleaning solution thereby has free access to the milk outlet (28 as shown in Exhibit B) which is in communication with the central milk supply. In other words, as shown in Exhibit B which is a derivative of Fig. 2 of '845, the supplemented line in the exploded view illustrates the fluid path described immediately above. This circuitous path has

been discovered by the applicant to be problematic and can potentially contaminate the central milk supply. Of course the transition from the cleaning to milking states are executed quickly by the actuator, this perilous cross contamination state as illustrated in the attached figures is not an inherent obvious flaw in the design, but rather took meticulous insight by the applicant to discover the solution to the cross contamination problem.

Therefore, the present claims illustrating a nonobvious invention are in part nonobvious due to the fact of a discovery of a problem source. The circuitous path described above is not immediately obvious to one skilled in the art. In fact, it required cutting and pasting and superimposing ports and components and visualizing three-dimensional hidden passageways such as the supplemental passageway 50 that are not even shown in Figs. 3A and 3B of '845. In other words, it takes a rigorous assessment to determine the potential leakage path which can occur in a split-second during the transition phase from a milking position to a cleaning position of the prior art device. As recited in Eibel Process Company v. Minnesota in Ontario Paper Company 261 US 45 (1923), this landmark case relating to the invention which essentially increased the angle of a Fourdrinier paper producing machine was a superficially simple idea where the effect of increasing the angle increased the rate of flow of pulp on the wire cloth to equal the rate of flow of the wire cloth itself. The Supreme Court upheld the claim on the machine thusly improved. As stated in the court's decision, "The invention was not the mere use of a high or substantial pitch to remedy a known source of trouble. It was the discovery of the source of trouble. It was the discovery of the source not before known and the application of the remedy for which Eibel was entitled to be rewarded in his patent". *Eibel 261 US at 67.*

Therefore, in the present application, it is well known in the food industry that the integrity of sanitary systems are paramount, and cross-contamination between non-digestible and sometimes poisonous cleaning solutions must absolutely be separated from the central repository of food product. In this case, there is a need to wash the udder of a cow and maintain separation of this washing liquid from the main milk supply. However, the applicant has identified a source to a problem, and as described in

Exhibits A and B, the source of the contamination problem is by no means obvious and the rearrangement of components to remedy the problem is a nonobvious solution.

Therefore, the first claim in the present application now clearly specifies that when the valve element is in transition from the milking position to the cleaning position, there is no fluid path between the cleaning fluid passage and the second milk passage. It is clear that the prior art fails to teach the claimed invention, and in fact steers away and teaches the opposite of the intent of the applicant. The additional independent claims 19 and 32 are amended in a similar fashion.

Therefore, the applicant believes that the application is in a condition for allowance. If there is any matter which could be expedited by consultation with the Applicant's attorney, such would be welcome. The Applicant's undersigned attorney can normally be reached at the telephone number set forth below.

Signed at Bellingham, County of Whatcom, State of Washington this Monday, January 03, 2005.

Respectfully submitted,
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By 

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